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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,815	02/06/2002	David Lockwood	53887-017	7720

20277   7590   07/28/2004

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EXAMINER
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ART UNIT	PAPER NUMBER
3628	

DATE MAILED: 07/28/2004

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/890,815
Filing Date: February 06, 2002
Appellant(s): LOCKWOOD, DAVID

MAILED

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GROUP 3600

Scott D. Paul
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4/15/2004.

(1)   Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2)   Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3)   Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4)   Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5)   Summary of Invention

The summary of invention contained in the brief is correct.

(6)   Issues

The appellant's statement of the issues in the brief is correct.

(7)   Grouping of Claims

Appellant's brief includes a statement that claims stand or fall together as a group with claim 1.

(8)   Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

6,188,993   Eng et al   2-2001

5,966,699   Zandi   10-1999

6,078,906   Huberman   6-2000

(10)   Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 and 7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, particularly, an abstract idea.

The Examiner notes that the disclosed invention is within the technological arts. The claimed invention is also noted not to be a computer program, data structure, a natural phenomenon, a non-descriptive material per se. The claimed invention does not include a series of steps to be performed by a computer. The claimed invention also is not a product for performing a process, nor is it a specific machine or manufacture. The claimed invention is not a specific tangible machine or process for facilitating a business transaction. Claims 1 and 7 do not appear to correspond to a specific machine or manufacture disclosed within the instant specification and thus encompass any product of the class configured in any manner to perform the underlying process. Claims 1 and 7do not appear to correspond to a specific machine or manufacture, and thus

encompass any product of the class configured in any manner to perform the underlying process. The claimed invention of claims 1 and 7 also do not include a post-computer process activity or a pre-computer process activity. Thus, no physical transformation is performed, no practical application in the technological art is found. Consequently, claims 1 and 7 are analyzed based upon the underlying process, and are thus rejected as being directed to a non-statutory process.

See State Street Bank & Trust Co. V. Signature Financial Group Inc., 47 USPQ2d 1597 (Fed. Cir. 1998) where the Federal Circuit held that:

" [T]he transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it provides "a useful, concrete and tangible result".

Double Patenting

2.   Claim 7 objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eng et al

(hereinafter Eng - US 6,188,993) in view of Zandi (US 5,966,699).

Re. Claims 1 and 3, Eng discloses a Inside Money (IM) is a synthetic currency

transaction network that includes multiple mutual funds, a means for connecting

potential borrowers to potential lenders of IM shares, and methods and techniques for

conducting private IM share transactions, [entire document particularly, Abs; C2 L8-

L35], receiving a plurality of first indications of offers (participants who wish to loan) to

lend a security from respective lenders, each of the offers to lend a security indicating a

corresponding quantity of the security and a corresponding fee [C7 L5-L11; C2 L24-L35;

C2 L66 to C3 L6; C3 L27-L31; C5 L12-L15], and receiving a plurality of second

indications of offers to borrow the security from respective borrowers, each of the offers

(participants who wish to borrow) to borrow the security indicating a corresponding

quantity of the security and a corresponding fee [C7 L5-L11; C2 L24-L35; C2 L66 to C3

L6; C3 L27-L31], and matching one of the offers from one of the lenders with one of the

offers from one of the borrowers based on the corresponding quantity and the fee [C3

L7-L32] . Eng, explicitly, does not disclose sending a notification of a transaction

between the one lenders and the one borrower based on the matched offer. However,

Zandi discloses sending a notification of a transaction between the one lenders and the

one borrower based on the matched offer [Zandi – C7 L27-L30; C45-L60]. It would

have been obvious to one of ordinary skill in the art at the time the Applicant's invention

was made to combine disclosures of Eng and Zandi to send notifications to both parties

(lender and borrower) of the acceptance or denial of the of the deal.

Re. Claim 2, Eng discloses further comprising recording the transaction in a database

electronically accessible to a plurality of borrowers and lenders over at least one

computer network and least one computer [C4 L52-L64].

Re. Claim 4, Eng discloses real time transaction [C3 L33-L45] Eng, explicitly, does not

discloses computer system is strictly connected to separate listing financial incentives

for real-time confirmation of acceptable financial transactions of the borrowing and

lending of securities. However, Zandi discloses wherein said computer system is strictly

connected to separate listing financial incentives for real-time confirmation of acceptable

financial transactions of the borrowing and lending of securities (loans) [C1 L52-L61; C2

L49-L61; C3 L56 to C4 L26]. It would have been obvious to one of ordinary skill in the

art at the time the Applicant's invention was made to combine disclosures of Eng and

Zandi to allow lender to submit bids and borrower to download bids from the server.

Re. Claim 5, Eng discloses Eng IM network and bulletin board system (internet

accesses), server [C2 L24-L33; C4 L1-L6; C7 L5-L12]. Eng, explicitly, does not

discloses at least one Web computer server for serving as host for computer browsers

and providing said browsers with the capability to participate in various auctions of a

single product at a specified time the specified number of the product available for sale,

and a Web server cooperating the set the database computer separate from some of

servers, said computer based computer being in communication with at least one said

Web computer server to allow retrieval product information which includes: a) securities

description, b) a quantity of the security to be auctioned c) a duration of the auction, and

d) a minimum amount and rate. However, Zandi discloses at least one Web computer

server for serving as host for computer browsers and providing said browsers with the

capability to participate in various auctions of a single product at a specified time the

specified number of the product available for sale, and a Web server cooperating the

set the database computer separate from some of servers, said computer based

computer being in communication with at least one said Web computer server to allow

retrieval product information which includes [C3 L19-L34], a). Securities description [C6

L1-L67], b). a quantity of the security to be auctioned [C8 L1-L5], c). a duration of the

auction [C2 L28-L31], and d). a minimum amount and rate [C8 L2-L3; C10 L33-L45; C5

L41-L43]. It would have been obvious to one of ordinary skill in the art at the time the

Applicant's invention was made to combine disclosures of Eng and Zandi to provide a

Web site as a communication link to external users (participants) that provides step-by-

step information and instruction.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eng and Zandi as applied to claim 3 above, in view of Huberman (US 6,078,906).

Re. Claim 6, neither Eng nor Zandi, explicitly, disclose configured for implementing one or more auction mechanisms, including an English auction, a Dutch auction, a first price sealed bid uniform second price double auction, a simultaneous bidding hazard system, a handshake whisper time interval auction, a silent auction, a callable bid rotation auction, and a Swiss auction. However, Huberman discloses configured for implementing one or more auction mechanisms, including an English auction, a Dutch auction, a first price sealed bid uniform second price double auction, a simultaneous bidding hazard system, a handshake whisper time interval auction, a silent auction, a callable bid rotation auction, and a Swiss auction [C10 L31-L67]. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to modify disclosure of Eng and Zandi and include English auction, a Dutch auction, and other types, as taught by Huberman to provide different types of options for auctioning.

(11) *Response to Argument*

I. Response to Appellant argument "The rejection of claims 1-7 under 35 U.S.C.

§ 101

Regarding the requirement under 35 U.S.C. § 101 that a claimed invention be limited to the technological arts in order to be deemed statutory and in response to

Appellant's arguments found on pages 4-13, the Examiner submits that the phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts." See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts."

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature," "natural phenomena," and "abstract ideas." See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998). This addresses the second test under 35 U.S.C § 101 of whether or not an invention is eligible for a patent. The Manual of Patent Examining Procedure reiterates this point. More specifically, MPEP § 2106(II)(A) states, "The claimed invention as a whole must accomplish a practical application. That is, it must produce a 'useful, concrete and tangible result.' *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02." Furthermore, "Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101." (MPEP § 2106(II)(A))

This "two prong" test was evident when the Court of Customs and Patent

Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences

(BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held

that the recited mathematical algorithm did not render the claim as a whole non-

statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409

U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the

issue of the "technological arts." The court developed a "technological arts" analysis:

> The "technological" or "useful" arts inquiry must focus
> on whether the claimed subject matter...is statutory, not on
> whether the product of the claimed subject matter...is
> statutory, not on whether the prior art which the claimed
> subject matter purports to replace...is statutory, and not on
> whether the claimed subject matter is presently perceived to
> be an improvement over the prior art, e.g., whether it
> "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source

human language (e.g., Russian) into a target human language (e.g., English). The

court found that the claimed computer implemented process was within the

"technological art" because the claimed invention was an operation being performed by

a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*

never addressed this prong of the test. In *State Street Bank & Trust Co.,* the court

found that the "mathematical exception" using the Freeman-Walter-Abele test has little,

if any, application to determining the presence of statutory subject matter but rather,

statutory subject matter should be based on whether the operation produces a "useful,

concrete and tangible result." See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analyses go towards whether the claimed invention is non-statutory because of the presence of an abstract idea. *State Street* never addressed the first part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) **was already determined to be within the technological arts** under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences in affirming a §101 rejection finding the claimed invention to be non-statutory for failing the technological arts test. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

What is indeed important to note in the *Bowman* decision is that the Board acknowledged the dichotomy of the analysis of the claims under 35 U.S.C. § 101, thereby emphasizing the fact that not only must the claimed invention produce a "useful, concrete and tangible result," **but that it must also be limited to the technological arts** in order to be deemed statutory under the guidelines of 35 U.S.C. § 101. The Board very explicitly set forth this point:

> [1] We agree with the examiner. Appellant has carefully avoided tying the disclosed and claimed invention to any

technological art or environment. As noted by the examiner, the disclosed and claimed invention is directed to nothing more than a human making mental computations and manually plotting the results on a paper chart [answer, page 5]. The Examination Guidelines for Computer-Related Inventions are not dispositive of this case because there is absolutely no indication on this record that the invention is connected to a computer in any manner.

Despite the express language of 35 U.S.C. §101, several judicially created exceptions have been excluded from subject matter covered by Section 101. These exceptions include laws of nature, natural phenomenon, and abstract ideas. *See Diamond v. Diehr*, 450 U.S. 175, 185, 209 USPQ 1, 7(1981). We interpret the examiner's rejection as finding that the claimed invention before us is nothing more than an abstract idea because it is not tied to any technological art or environment. Appellant's argument is that the physical (even manual) creation of a chart and the plotting of a point on this chart places the invention within the technological arts.

The phrase "technological arts" has been created to offer another view of the term "useful arts." The Constitution of the United States authorizes and empowers the government to issue patents only for inventions which promote the progress [of science and] the useful arts. We find that the invention before us, as disclosed and claimed, does not promote the progress of science and the useful arts, and does not fall within the definition of technological arts. The abstract idea which forms the heart of the invention before us does not become a technological art merely by the recitation in the claim of "transforming physical media into a chart" [sic, drawing or creating a chart] and "physically plotting a point on said chart."

In summary, we find that the invention before us is nothing more than an abstract idea which is not tied to any technological art, environment, or machine, and is not a useful art as contemplated by the Constitution of the United States. The physical aspects of claim 1, which are disclosed to be nothing more than a human manually drawing a chart and plotting points on this chart, do not automatically bring the claimed invention within the technological arts. For all these reasons just discussed, we sustain the examiner's rejection of the appealed claims under 35 U.S.C. §101. *See*

Ex parte Bowman, 61 USPQ2d (BNA) 1669, 1671
(BdPatApp&Int 2001)

Similarly, in the present application, claims 1 and 7 are deemed to be non-statutory because they are not limited to the technological arts; all recited steps could be performed manually by a human, thereby reinforcing the fact that Appellant's invention fails to "[p]romote the progress of science and useful arts," as intended by the United States Constitution under Art. I, §8, cl. 8 regarding patent protection.

In conclusion, the Examiner submits that Appellant's claims do not meet the technological arts requirement under 35 U.S.C. § 101, as articulated in *Musgrave, Toma,* and *Bowman* as well as the Manual of Patent Examining Procedure.

II. Response to Appellant's argument that Examiner has:

(i) not properly construed a meaning for the term "security" consistent with that term's ordinary and customary meaning.

Response to (i):

a- Appellant has not defined the term "security" in his specification and therefore the term security is interpreted in its broadest term which includes; <u>mutual funds</u>, stocks, bonds, letters of credit, notes, etc.

b- Primary reference (Eng et al - US 6,188,993) discloses Inside Money (IM) synthetic currency which includes <u>multiple mutual funds</u> (see col. 2 lines 24-26) and to create or liquidate IM and directing to what particular investments securities should be purchased or sold (see col.

4 lines 30-47 -"The investment Advisor (IA) ... (long, medium, or long term) investments should be purchased or sold to ... The IA 19 could establish a unit of participation ... , securities, notes, ... and other financial instruments.", therefore the synthetic currency of Eng et al includes the Appellant's security too.

(ii) not established that the applied prior art teaches or suggests that each of the offers to lend a security indicates a corresponding fee.

(iii) not established that the applied prior art teaches or suggests that a fee is associated with offers to borrow a security.

Response to (ii) & (iii):

Primary reference discloses (col. 3 lines 17-23 & line 27)

"When a loan is made an IM lender can choose to retain the interest bearing features of IM and negotiate an interest payment from the borrower. For example, <u>company A could loan IM shares to Company B</u>, for Company B to pay IM to Company C; <u>Company A and B may negotiate a rate of return</u>, for example, <u>IM plus some additional % which would be the IM return plus some additional percent of the value of IM</u> that Company B must pay to Company A for borrowing the IM. The system of the present invention provides a means to track who holds IM, who receives the interest due on the IM and which participants owe points to the other participants. A combination of sliding <u>loan rates and transaction fees</u> provide users with incentive to execute IM transactions as soon as

possible. This creates a transaction environment with a more evenly

distributed transaction arrival rate over the business day."

and (col. 5 lines 12-14) "The LA 12 is responsible for the collection

of all debts and <u>fees associated with the system's lending and borrowing

function</u>.", which means there are two functions (lending and borrowing)

and two transaction fees not a single fee.

(iv) has improperly asserted a motivation to combine the applied prior art that

does not originate from the applied prior art.

Response to (iv):

Secondary reference (Zandi - US 5,966,699) discloses the

followings:

- sending a notification of a transaction between the one

  lenders and the one borrower based on the matched offer

  (col. Lines 27-30; col. 45 line 60),

- wherein said computer system is strictly connected to

  separate listing financial incentives for real-time

  confirmation of acceptable financial transactions of the

  borrowing and lending of securities (including loans) (col. 1

  lines 52-61; col. 2 lines 49-61; col. 3 line 56 to col. 4 line

  26), and

at least one Web computer server for serving as host for computer

browsers and providing said browsers with the capability to participate in

various auctions of a single product at a specified time the specified

number of the product available for sale, and a Web server cooperating

the set the database computer separate from some of servers, said

computer based computer being in communication with at least one said

Web computer server to allow retrieval product information which includes

(col. 3 lines19-34), a). Securities description (col. 6 line 67), b). a quantity

of the security to be auctioned [col. 8 lines 1-5], c). a duration of the

auction (col. 2 lines 28-31), and d). a minimum amount and rate (col. 8

lines2-3; col. 10 lines 33-45; col. 5 lines 41-43). Therefore, it would have

been obvious to one of ordinary skill in the art at the time the Applicant's

invention was made to modify the disclosure of Eng and include sending a

notification of a transaction, computer system with real-time confirmation

of acceptable financial transactions, and Web computer server for serving

as host for computer browsers, as taught by Zandi, to send notifications to

both parties (lender and borrower) to inform them of acceptance or denial

of the of the deal and closing of auction, to allow lender to submit bids and

borrower to download bids from the server, and to provide a Web site as a

communication link to external users which provides step-by-step

information and instruction (Abstract; Figures 3, 4A, 4B & 5; col.7 lines 27-

31; col. 8 lines 45-65).

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Harish T Dass
Examiner
Art Unit 3628

July 26, 2004

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